Anja Bieberle-HÃ¼tter

List of Publications by Year
in descending order

71 papers	3,486 citations	159358 30 h-index	138251 58 g-index
77 all docs	77 docs citations	77 times ranked	2996 citing authors

#	Article	IF	Citations
1	Photoelectrochemical properties of plasma-induced nanostructured tungsten oxide. Applied Surface Science, 2022, 580, 151979.	3.1	10
2	Anti-Ferromagnetic RuO₂: A Stable and Robust OER Catalyst over a Large Range of Surface Terminations. Journal of Physical Chemistry C, 2022, 126, 1337-1345.	1.5	21
3	Challenges of modeling nanostructured materials for photocatalytic water splitting. Chemical Society Reviews, 2022, 51, 3794-3818.	18.7	64
4	A multiscale modelling approach to elucidate the mechanism of the oxygen evolution reaction at the hematiteâ€"water interface. Faraday Discussions, 2021, 229, 89-107.	1.6	11
5	Operando attenuated total reflection Fourier-transform infrared (ATR-FTIR) spectroscopy for water splitting. Journal Physics D: Applied Physics, 2021, 54, 133001.	1.3	12
6	Oxygen evolution reaction (OER) mechanism under alkaline and acidic conditions. JPhys Energy, 2021, 3, 026001.	2.3	121
7	Tailoring the Performance of ZnO for Oxygen Evolution by Effective Transition Metal Doping. ChemSusChem, 2021, 14, 3064-3073.	3.6	9
8	Charge carrier dynamics and photocatalytic activity of {111} and {100} faceted Ag3PO4 particles. Journal of Chemical Physics, 2020, 152, 244710.	1.2	6
9	Understanding the Impact of Different Types of Surface States on Photoelectrochemical Water Oxidation: A Microkinetic Modeling Approach. ACS Catalysis, 2020, 10, 14649-14660.	5.5	31
10	Relating the 3D Geometry and Photoelectrochemical Activity of WO₃-Loaded n-Si Nanowires: Design Rules for Photoelectrodes. ACS Applied Energy Materials, 2020, 3, 9628-9634.	2.5	3
11	Simple and Fast High-Yield Synthesis of Silver Nanowires. Nano Letters, 2020, 20, 5759-5764.	4.5	55
12	From Geometry to Activity: A Quantitative Analysis of WO₃/Si Micropillar Arrays for Photoelectrochemical Water Splitting. Advanced Functional Materials, 2020, 30, 1909157.	7.8	20
13	Monolayer Nitrides Doped with Transition Metals as Efficient Catalysts for Water Oxidation: The Singular Role of Nickel. Journal of Physical Chemistry C, 2019, 123, 26289-26298.	1.5	12
14	Boosting the Performance of WO₃/nâ€Si Heterostructures for Photoelectrochemical Water Splitting: from the Role of Si to Interface Engineering. Advanced Energy Materials, 2019, 9, 1900940.	10.2	48
15	Electrochemistry of Sputtered Hematite Photoanodes: A Comparison of Metallic DC versus Reactive RF Sputtering. ACS Omega, 2019, 4, 9262-9270.	1.6	7
16	The importance of charge redistribution during electrochemical reactions: a density functional theory study of silver orthophosphate (Ag₃PO₄). Physical Chemistry Chemical Physics, 2019, 21, 9531-9537.	1.3	7
17	Impedance Spectra and Surface Coverages Simulated Directly from the Electrochemical Reaction Mechanism: A Nonlinear State-Space Approach. Journal of Physical Chemistry C, 2019, 123, 9981-9992.	1.5	16
18	Electrochemical water oxidation on WO3 surfaces: A density functional theory study. Catalysis Today, 2019, 321-322, 94-99.	2.2	55

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19	Why does NiOOH cocatalyst increase the oxygen evolution activity of Î±-Fe2O3?. Journal of Chemical Physics, 2019, 150, 041729.	1.2	19
20	Physical and Chemical Defects in WO₃ Thin Films and Their Impact on Photoelectrochemical Water Splitting. ACS Applied Energy Materials, 2018, 1, 5887-5895.	2.5	53
21	Nanostructuring of iron thin films by high flux low energy helium plasma. Thin Solid Films, 2017, 631, 50-56.	0.8	11
22	Enhanced electrochemical water oxidation: the impact of nanoclusters and nanocavities. Physical Chemistry Chemical Physics, 2017, 19, 31300-31305.	1.3	6
23	The electrochemistry of iron oxide thin films nanostructured by high ion flux plasma exposure. Electrochimica Acta, 2017, 258, 709-717.	2.6	15
24	Orientation Sensitivity of Oxygen Evolution Reaction on Hematite. Journal of Physical Chemistry C, 2016, 120, 28694-28700.	1.5	42
25	Oxygen Evolution at Hematite Surfaces: The Impact of Structure and Oxygen Vacancies on Lowering the Overpotential. Journal of Physical Chemistry C, 2016, 120, 18201-18208.	1.5	107
26	Modeling and Simulations in Photoelectrochemical Water Oxidation: From Single Level to Multiscale Modeling. ChemSusChem, 2016, 9, 1223-1242.	3.6	87
27	A thermally self-sustained micro-power plant with integrated micro-solid oxide fuel cells, micro-reformer and functional micro-fluidic carrier. Journal of Power Sources, 2014, 258, 434-440.	4.0	22
28	Electrochemical Characterization of La_{0.58}Sr_{0.4}Co_{0.2}Fe_{0.8}O_{3âˆ’Î´}Thin Film Electrodes Prepared by Pulsed Laser Deposition. Journal of the Electrochemical Society, 2012, 159, B471-B482.	1.3	29
29	Syngas generation from n-butane with an integrated MEMS assembly for gas processing in micro-solid oxide fuel cell systems. Lab on A Chip, 2012, 12, 4894.	3.1	13
30	Analyzing a micro-solid oxide fuel cell system by global energy balances. International Journal of Hydrogen Energy, 2012, 37, 10318-10327.	3.8	11
31	Microstructures of YSZ and CGO Thin Films Deposited by Spray Pyrolysis: Influence of Processing Parameters on the Porosity. Advanced Functional Materials, 2012, 22, 3509-3518.	7.8	35
32	Thin film growth of yttria stabilized zirconia by aerosol assisted chemical vapor deposition. Journal of Power Sources, 2012, 202, 47-55.	4.0	31
33	An investigation of the oxygen reduction reaction mechanism of La0.6Sr0.4Co0.2Fe0.8O3 using patterned thin films. Solid State Ionics, 2012, 206, 7-16.	1.3	63
34	Processing of FoturanÂ® glass ceramic substrates for micro-solid oxide fuel cells. Journal of the European Ceramic Society, 2012, 32, 3229-3238.	2.8	35
35	Micro-solid oxide fuel cells using free-standing 3mol.% yttria-stabilised-tetragonal-zirconia-polycrystal electrolyte foils. Journal of Power Sources, 2011, 196, 10069-10073.	4.0	15
36	Characterization of thin films for solid oxide fuel cells facilitated by micropatterning. Scripta Materialia, 2011, 65, 84-89.	2.6	7

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37	Nonlinear oxidation kinetics of nickel cermets. Acta Materialia, 2011, 59, 6239-6245.	3.8	13
38	Oxygen incorporation in porous thin films of strontium doped lanthanum ferrite. Journal of Electroceramics, 2011, 27, 134-142.	0.8	19
39	Micro-fabrication of patterned LSCF thin-film cathodes with gold current collectors. Solid State Ionics, 2011, 192, 619-626.	1.3	11
40	Microscopic and Nanoscopic Threeâ€Phaseâ€Boundaries of Platinum Thinâ€Film Electrodes on YSZ Electrolyte. Advanced Functional Materials, 2011, 21, 565-572.	7.8	89
41	Tailoring of La_xSr_{1â€x}Co_yFe_{1â€y}O_{3â€Î´} Nanostructure by Pulsed Laser Deposition. Advanced Functional Materials, 2011, 21, 2764-2775.	7.8	66
42	Crystallization and Microstructure of Yttriaâ€Stabilizedâ€Zirconia Thin Films Deposited by Spray Pyrolysis. Advanced Functional Materials, 2011, 21, 3967-3975.	7.8	34
43	Impact of substrate material and annealing conditions on the microstructure and chemistry of yttria-stabilized-zirconia thin films. Journal of Power Sources, 2011, 196, 7372-7382.	4.0	22
44	The impact of etching during microfabrication on the microstructure and the electrical conductivity of gadolinia-doped ceria thin films. Journal of Power Sources, 2011, 196, 6070-6078.	4.0	19
45	Flame spray deposition of La0.6Sr0.4CoO3â ˆ'Î´ thin films: Microstructural characterization, electrochemical performance and degradation. Journal of Power Sources, 2010, 195, 8152-8161.	4.0	31
46	Agglomeration of Pt thin films on dielectric substrates. Physical Review B, 2010, 82, .	1.1	87
47	Electrical conductivity and crystallization of amorphous bismuth ruthenate thin films deposited by spray pyrolysis. Physical Chemistry Chemical Physics, 2010, 12, 13933.	1.3	9
48	Ostwald Ripening and Oxidation Kinetics of Nickel Gadolinia Doped Ceria Anodes. ECS Transactions, 2009, 25, 2057-2060.	0.3	4
49	Phase Transformation in Spray Pyrolysis Yttria-stabilized Zirconia Thin Films. ECS Transactions, 2009, 25, 1551-1554.	0.3	0
50	FoturanÂ® Glass Ceramic - a Substrate for Power Delivering Free-standing Âµ-SOFC Membranes. ECS Transactions, 2009, 25, 983-988.	0.3	1
51	Guidelines for Thin Film Usage and Microfabrication for Solid Oxide Fuel Cell Application. ECS Transactions, 2009, 25, 925-930.	0.3	1
52	Electrochemical Characterization of Micro-Patterned La0,6Sr0,4Co0,2Fe0,8O3 Thin Film Structures on Fused Silica. ECS Transactions, 2009, 25, 2391-2396.	0.3	0
53	Miniaturized Low-temperature Solid Oxide Fuel Cells with an Yttria-stabilized-zirconia Foil Electrolyte. ECS Transactions, 2009, 25, 989-993.	0.3	1
54	Micro-solid oxide fuel cells: status, challenges, and chances. Monatshefte FÃ¼r Chemie, 2009, 140, 975-983.	0.9	66

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55	Review on microfabricated micro-solid oxide fuel cell membranes. Journal of Power Sources, 2009, 194, 119-129.	4.0	378
56	Modelling Study of Surface Reactions, Diffusion, and Spillover at a Ni/YSZ Patterned Anode. Journal of the Electrochemical Society, 2009, 156, B663.	1.3	174
57	FUEL CELLS â€" SOLID OXIDE FUEL CELLS | Micro Cells. , 2009, , 148-157.		0
58	Micro Solid Oxide Fuel Cells on Glass Ceramic Substrates. Advanced Functional Materials, 2008, 18, 3158-3168.	7.8	138
59	A micro-solid oxide fuel cell system as battery replacement. Journal of Power Sources, 2008, 177, 123-130.	4.0	205
60	Fabrication and electrochemical characterization of planar Ptâ€"CGO microstructures. Acta Materialia, 2008, 56, 177-187.	3.8	27
61	Micro-Hotplate Devices for Micro-SOFC. ECS Transactions, 2007, 7, 421-427.	0.3	0
62	Micro-hotplatesâ€"A platform for micro-solid oxide fuel cells. Journal of Power Sources, 2007, 166, 143-148.	4.0	35
63	Thin films for micro solid oxide fuel cells. Journal of Power Sources, 2007, 173, 325-345.	4.0	302
64	Fabrication of Micro Solid Oxide Fuel Cell by Thin Film Processing Hybridization: I. Multilayer Structure of Sputtered YSZ Thin Film Electrolyte and Ni-Based Anodes deposited by Spray Pyrolysis. Journal of the Korean Ceramic Society, 2007, 44, 589-595.	1.1	0
65	Electrical and electrochemical characterization of microstructured thin film La1â^'xSrxCoO3 electrodes. Solid State Ionics, 2006, 177, 1969-1975.	1.3	65
66	Three dimensional arrays of hollow gadolinia-doped ceria microspheres prepared by r.f. magnetron sputtering employing PMMA microsphere templates. Journal of Electroceramics, 2006, 17, 695-699.	0.8	12
67	Fabrication and structural characterization of interdigitated thin film La1 â^' xSrxCoO3(LSCO) electrodes. Journal of Electroceramics, 2006, 16, 151-157.	0.8	30
68	State-space modeling of the anodic SOFC system Ni, H2â€"H2Oâ^£YSZ. Solid State Ionics, 2002, 146, 23-41.	1.3	143
69	Characterization of sputter-deposited WO3 and CeO2â^'xâ€"TiO2 thin films for electrochromic applications. Thin Solid Films, 2001, 392, 134-141.	0.8	31
70	The Electrochemistry of Ni Pattern Anodes Used as Solid Oxide Fuel Cell Model Electrodes. Journal of the Electrochemical Society, 2001, 148, A646.	1.3	262
71	Reaction mechanism of Ni pattern anodes for solid oxide fuel cells. Solid State Ionics, 2000, 135, 337-345.	1.3	99